



BOROUGH OF WIDNES

REPORT

ON THE

HEALTH OF THE BOROUGH

DURING 1909,

INCLUDING

**The REPORT on the MEDICAL INSPECTION OF
CHILDREN IN THE ELEMENTARY SCHOOLS**

AND THE

REPORT of the INSPECTOR OF NUISANCES

BY

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WIDNES :

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BOROUGH OF WIDNES

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

1909

TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present to you my Fifth Annual Report on the Health and Sanitary conditions of the Borough.

The year has not been notable in any particular way as was the case in the previous year, with the exception that The Housing and Town Planning Bill has been passed, and this will, in the future, have far reaching effects.

The statistics for the year are again good, the only falling off being in the birth rate, which is 31.2 as against 32.4 in 1908, and compared with a rate of 25.6 in England and Wales.

The death rate is 16.13, as compared with 17.3 in 1908.

The zymotic death rate is 1.89, as compared with 1.12 in England and Wales.

I again append my report on the Medical Inspection of School Children, and also the Report of the Inspector of Nuisances.

I am, Gentlemen,

Your obedient servant,

C. S. BREBNER.

SECTION I.

SUMMARY OF STATISTICS, 1909.

Estimated Population	32,111
Births: Male 512, Female 490	1,002
Birth Rate per 1,000 of Population	31.2
Deaths: Male 289, Female 229	518
Death Rate per 1,000 of Population	16.1
Zymotic Death Rate	1.9
Infantile Mortality (per 1,000 births)	141
Excess of Births over Deaths	484
Area of Borough in Acres	3,039
Density of Population (i.e., No. of persons per acre)	10.5

**ENGLAND AND WALES*, 1909—

Birth Rate	25.6
Death Rate	14.5
Zymotic Death Rate	1.12
Infantile Mortality	109

*These figures are subject to revision.

SECTION II.

VITAL STATISTICS.

POPULATION—

It is customary to estimate the population up to the middle of any given year by the increase observed between two census years.

Between the census of 1891 and that of 1901, however, the population of Widnes had decreased, so that properly speaking we should still estimate a decrease and that in fact is what the Registrar General has done. He informs me that the population by his estimate is 27,647. I think, however, it is quite apparent that the population has again been increasing, and following my custom in the previous years, I estimate the population up to the middle of 1909 as 32,111.

The period between census years (10 years) is too long, and it is interesting to observe that the Registrar General, in his lately published report, comments on the impossibility of making trustworthy estimates of population for inter-censal years. He further states that "the only remedy is the taking of the census at more frequent intervals." Owing to these difficulties the population of the Borough has been estimated from the number of inhabited houses, and the average number of occupants per house as found at the last census. This method is apt to be misleading, as the new houses may be of a different class and the average number of persons per house may be altered.

During the last ten years the Birth Rate has been steadily declining, so that it is almost certain that the average number of persons per house is not so large as ten years ago. Therefore, I am afraid that if the estimate I gave last year (32,111) were again increased, it would be above the actual census population in 1911, and consequently we should be calculating our statistics on a wrong basis. I append a table which is supplied annually to the Council by the Education Department, showing the number of houses, etc., in the Borough.

TOTAL NUMBER OF HOUSES IN WIDNES, JULY, 1909—

	Number of Houses	Number of Inhabited Houses	Lock-up Shops	Empty Houses	Houses in course of erection	District
	697	656	1	40	4	East
	3867	3570	126	171	22	West
	1762	1647	52	63	0	South
	—	—	—	—	—	
1909	6326	5873	179	274	26	
	—	—	—	—	—	
1908	6282	5850	193	239	37	

No. of Children taken in Census:—	1908	1909
	—	—
Between 3 and 14—East District.....	868	888
West District ...	4531	4541
South District...	2342	2341
	—	—
	7741	7770

BIRTHS—

During the year there were 1,002 Births registered, including 512 Males and 490 Females. In the preceding year there were 1042 Births. This gives a Birth Rate of 31.2, as compared with 32.4 in 1908. The average rate for the last ten years (1899-1908) is 32.7. The Birth Rate for England and Wales in 1909 was 25.6.

STILL BIRTHS—

Sixty-nine bodies of still-born children were interred in the Cemetery and graveyards of the Borough.

ILLEGITIMATE BIRTHS—

Twenty-one illegitimate births were registered during the year, a percentage of 2.1 illegitimate to legitimate. This is the first occasion on which these births have been referred to and the reason for so calculating them is for the purpose of observing the difference (if any) in the infantile mortality in the two classes of children.

Table of Births for each month during 1909:—

	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Ttl.
Males ...	47	40	47	42	36	55	43	39	44	35	46	38	512
Females ...	29	44	58	39	39	43	45	52	31	34	52	24	490
	76	84	105	81	75	98	88	91	75	69	98	62	1002

DEATHS—

During the year 459 Deaths were registered in the Borough, of which 243 were Males and 216 Females. No deaths were registered of persons who resided in other districts. Fifty-nine deaths of people resident in Widnes, but temporarily out of the Borough, have been registered. These have been reported to me by the Medical Officers of Health of the districts in which the deaths occurred and are to be included in my statistics. The great majority of these deaths occur in the Whiston Union Infirmary, while others occur in Liverpool.

The total list is as follows:—

	Males.	Females.	Total.
Whiston Union Workhouse	38	11	49
Rainhill Asylum	2	0	2
Royal Infirmary, Liverpool	4	1	5
Children's Infirmary, Liverpool ...	1	0	1
Eye and Ear Infirmary, Liverpool...	1	0	1
Maternity Hospital, Liverpool	0	1	1
	46	13	59

The total number of deaths, therefore, is 518, as compared with 556 in 1908. The average number of deaths for the last ten years is 538. From these figures are calculated the Crude (or general) and the Recorded death rates.

The Crude (or General) Death Rate is the proportion per 1,000 living of all deaths registered in the Borough. It is therefore 14.2, as compared with 15.3 in 1908.

The Recorded Death Rate is the death rate calculated in the same way as the Crude death rate, but with allowance made for the deaths of residents occurring outside the district, and for deaths of non-residents occurring in the district. It is therefore 16.13, as compared with 17.3 in 1908.

The corrected death rate of a town is the death rate which would have been recorded if the age and sex distribution of the population had been the same as that of the country as a whole. It is obtained by multiplying the Recorded death rate by a factor of correction worked out by the Registrar General. As, however, no factor is available for this Borough, I am unable to calculate a corrected death rate. This is unfortunate, as it is only the corrected death rate which can fairly be compared with the death rate of the country as a whole.

MORTALITY IN AGE GROUPS—

Deaths under one year	142
Deaths over one year and under five years	78
Deaths over five years and under fifteen years	22
Deaths over fifteen years and under twenty-five years...	22
Deaths over twenty-five and under sixty-five years	182
Deaths over sixty-five years	72
	<hr/>
	518

During the year seventeen inquests were held in the Borough. Eleven deaths were certified by Coroner's Certificate without inquests being held, and one death was registered on the authority of the Registrar General.

INQUESTS—

Manslaughter	1
Accidents—Burns	5
Falls	2
Fractured Skull	1
Killed on Railway	1
Septicæmia after accident	1
Natural Causes	1
Phthisis	1
Drowning	3
	<hr/>
Total.....	17

DEATHS CERTIFIED BY CORONER WITHOUT INQUEST—

Convulsions	4
Difficult Birth	1
Heart Failure	3
Natural Causes	2
Senile Decay	1
	<hr/>
Total.....	11

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1909—

CAUSES OF DEATH	All Ages	Under 1 Year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
Small-pox	—	—	—	—	—	—	—
Measles	16	—	15	1	—	—	—
Scarlet Fever	5	—	5	—	—	—	—
Whooping cough	23	12	10	1	—	—	—
Diphtheria (including Membranous croup...	1	—	—	1	—	—	—
Croup	1	—	1	—	—	—	—
Fever (Enteric)	2	—	—	—	1	1	—
Epidemic Influenza ...	18	—	—	—	2	14	2
Diarrhœa	14	8	5	—	—	—	1
Enteritis	40	27	8	1	—	2	2
Gastritis	2	2	—	—	—	—	—
Erysipelas	1	—	—	—	—	—	1
Phthisis (Pulmonary Tuberculosis) ...	32	—	—	2	8	22	—
Other Tuberculous Diseases	12	2	3	4	—	3	—
Cancer, malignant disease	18	—	—	—	—	13	5
Bronchitis	41	7	4	—	—	24	6
Pneumonia	57	12	12	3	4	21	5
Pleurisy	3	—	—	—	—	3	—
Other Diseases of Res- piratory Organs	6	—	—	—	1	5	—
Alcoholism (Cirrhosis of Liver)	1	—	—	—	—	1	—
Venereal diseases	1	—	—	—	—	1	—
Premature Births	14	14	—	—	—	—	—
Diseases and Accidents of Parturition ...	4	—	—	—	1	3	—
Heart Disease	35	—	—	2	1	24	8
Accidents	13	—	4	1	—	7	1
All other causes	158	58	11	6	4	38	41
All Causes	518	142	78	22	22	182	72

*VITAL STATISTICS OF WHOLE DISTRICT DURING 1909 AND
PREVIOUS YEARS—*

Year	Population estimated to middle of each Year	Births		Total Deaths Registered in the District			
		Number	Rate	Under 1 Year of Age		At all Ages	
				Number	Rate per 1000 Births Registered	Number	Rate
1899	32000	1066	31·30	218	204	622	19·7
1900	32000	999	31·21	207	207	643	20·09
1901	28580	944	33 0	180	191	515	18·00
1902	28580	1004	35·12	136	135	444	15·53
1903	28580	998	34·80	143	143	448	15·6
1904	29569	1011	34·0	173	171	519	17·5
1905	30604	999	32·6	157	157	496	16·2
1906	30604	956	31·2	187	195	574	18 7
1907	32111	1024	31·8	147	143	563	17·5
1908	32111	1042	32·4	143	137	556	17·3
Averages for years 1899-1908	30473	1004	32·74	169	168	538	17·6
1909	32111	1002	31·2	142	141	518	16·1

DEATHS FROM RESPIRATORY DISEASES—

There were 107 deaths from Bronchitis, Pneumonia, and other Respiratory Diseases, giving a death rate of 3.3 per 1,000 of the population, as compared with 121 deaths (a death rate of 3.7) in 1908.

CANCER AND OTHER MALIGNANT DISEASE—

There were 18 deaths from Cancer, etc., during the year, as compared with 15 in 1908. Of the 18, 11 were males and 7 females. I append a table showing the deaths from these Diseases since the year 1900.

1900 — 7	1903 — 7	1906 — 26
1901 — 0	1904 — 2	1907 — 14
1902 — 6	1905 — 1	1908 — 15

MORTALITY FROM ALL CAUSES—

The following table shows the distribution of deaths in the various Wards of the Borough. The remaining 59 deaths occurred outside the Borough.

WARD	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	Above 65	TOTAL
Farnworth ..	16	10	1	3	15	11	56
Halton	25	14	3	3	23	7	75
Simm's Cross	29	17	4	4	27	8	89
Victoria	31	15	6	1	34	13	100
Waterloo ...	28	9	2	4	27	7	77
West Bank ...	13	12	4	3	17	13	62
Grand Total	142	77	20	18	143	59	459

From this it will be seen that the largest number of deaths occurred in Victoria Ward, which also had the largest number of deaths of children under one year of age. The next largest number of deaths occurred in Simm's Cross Ward, and probably these wards are the most densely populated in the Borough at the present time.

It is convenient here to insert a table comparing the various Birth, Death, etc., rates of Widnes with the same rates of England and Wales, and also with those of the smaller and larger towns, for the year 1909.

	Annual Rates per 1000 living.				Deaths under one year to 1000 Births
	Births.	Deaths.		Principal Epidemic Diseases.	
		Crude	Corrected		
England and Wales.....	25.6	14.5	14.5	1.12	109
76 Great Towns.....	25.7	14.7	15.6	1.42	118
143 Smaller Towns.....	24.8	13.9	14.5	1.08	111
England and Wales less the 219 towns.....	25.6	14.5	13.6	0.80	98
WIDNES	31.2	16.1	...	1.9	141

It is hardly correct, as mentioned before, to compare the ordinary Death Rate of Widnes with that of England and Wales, as probably the age and sex distribution is not similar.

INFANTILE MORTALITY—

This refers to the deaths of children under one year of age, and is calculated by the proportion of such deaths to the number of births registered during the year.

There were 142 deaths of children under one year of age, which gives an Infantile Mortality rate of 141 per 1,000 births as compared with 137 in 1908.

The rate for England and Wales is 109 per 1,000 births.

Deaths from stated causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
<i>All Causes—</i>																	
Certified	23	7	5	2	37	22	12	6	13	15	8	6	8	6	4	5	142
<i>Common Infectious Diseases—</i>																	
Whooping Cough .....	...	...	...	...	...	1	1	...	1	1	2	1	1	1	...	3	12
<i>Diarrhæal Diseases—</i>																	
Diarrhœa, all forms...	...	...	...	...	...	2	1	...	1	...	...	1	2	1	...	...	8
Enteritis, Muco-enteritis	...	...	...	...	...	...	1	3	4	10	2	3	1	3	...	1	27
Gastro-enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	2
<i>Wasting Diseases—</i>																	
Premature Birth.....	9	...	2	2	13	1	...	...	...	...	...	...	...	...	...	...	14
Congenital Defects ...	4	3	1	...	8	3	1	...	...	...	1	...	1	...	...	...	14
Injury at Birth	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Atrophy, Debility, Marasmus	5	4	2	...	11	8	3	...	2	1	...	...	...	...	1	...	26
<i>Tuberculous Diseases—</i>																	
Tuberculous Meningitis...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	2
<i>Other Causes—</i>																	
Meningitis (not Tuberculous) .....	...	...	...	...	...	...	1	...	...	1	1	...	...	1	...	...	4
Convulsions	3	...	...	...	3	1	...	2	1	...	...	...	...	1	1	...	9
Bronchitis .....	...	...	...	...	...	3	...	...	1	1	1	...	1	...	...	...	7
Pneumonia.....	...	...	...	...	...	1	3	1	2	1	1	...	1	...	2	...	12
Other causes.....	1	...	...	...	1	2	...	...	...	...	...	...	1	...	...	...	4
	23	7	5	2	37	22	12	6	13	15	8	6	8	6	4	5	14

The accompanying table shows a complete classification of the deaths under one year of age, and it will be seen that the principal causes of death are Diarrhœal Diseases, Wasting Diseases (including Premature birth) and Lung Diseases (Bronchitis and Pneumonia).

Whooping Cough is also responsible for twelve deaths. Thirty-seven out of the 142 deaths occurred before the child was one month old, and 23 out of this 37 before the child was one week old.

Diarrhœal Diseases are accountable for 37 deaths of children under one year of age. This is a large number in a year in which diarrhœa was not very prevalent. These deaths are due in a great measure to the fact that the children are hand fed. Children on the breast very seldom get this zymotic diarrhœa, whereas it is quite easy for bottle milk to be infected by the germs, as in most cases very little care is taken with regard to cleanliness, etc.

The best safeguard therefore is breast feeding, but in cases where this is impossible (and these should be very few if the mother takes the proper kind of nourishment), the greatest cleanliness should be observed in the preparation of the infant's milk. One fatal mistake which is often committed, is to make a quantity ready for several feeds. This is allowed to lie about uncovered, and is readily infected by flies. A very good substitute for ordinary milk is now to be had without using patent foods of any kind. It is simply cow's milk dried by heat into a powder, and only requires the addition of water. This is extremely useful as it contains the essential parts of the milk and is sterile, i.e., free from germs. The heat applied in the drying kills all germs including the germ of Tubercle, which is so fatal to children.

I hope that shortly we may be able to adopt the Notification of Births Act in order to be able to give advice to mothers on the feeding of children and reduce the mortality from the Diarrhœal Diseases.

PREMATURE BIRTH—

Accounts for a large number of deaths under one year of age. In towns where the women go out to work, as in mill towns, one might expect some deaths from this cause, but in Widnes there is no women labour and I am of opinion that there is neglect or want of care, both before and after the confinement, in the mother's diet. There is an increasing tendency for the women of the working classes to do as little cooking as possible, and ready cooked or tinned foods are bought, often giving a less nutritious meal at a greater cost than if the food had been prepared at home.

LUNG DISEASES—

Bronchitis and Pneumonia are responsible for nineteen deaths of children under one year of age. None of these deaths were those of children under one month of age. Many of the deaths are caused by undue exposure of young children. It is common to find infants who have never been outside for weeks suddenly exposed, whatever the weather conditions may be. Another factor in the exposure of infants is the growing use of the small baby carriages, which, besides being

harmful from the upright posture which the child has to assume, are more exposed than the heavier, but more comfortable and hygienic perambulator.

WHOOPIING COUGH—

Caused twelve deaths of children under one year of age. This disease, like Measles, is one which is not treated seriously, and children are often simply allowed to take their chance of recovery. The popular idea is that fresh air is good for Whooping Cough, but in the early stages, when Pneumonia is easily set up, the disease should be treated like the other infectious diseases, and a certain amount of isolation insisted upon.

ZYMOTIC DEATH RATE—

The number of deaths due to the seven principal zymotic diseases, viz.: Small-pox, Scarlet Fever, Measles, Diphtheria, Whooping Cough, Fever (Typhus, Typhoid, and Continued) and Diarrhœa was 61, which gives a zymotic death rate of 1.89, as compared with 1.24 in 1908 and 2.5 in 1907.

Of these 61 deaths, 23 were due to Whooping Cough and 16 to Measles, a total of 39. That is to say 7.5 per cent. of the total deaths during the year were due to two diseases, usually considered as trivial.

SECTION III.

INFECTIOUS DISEASES—

The total number of Infectious Diseases notified during the year was 237, as compared with 150 in 1908. It will be seen from the table that the increase is due to the large number of Scarlet Fever cases which occurred during the year.

INFECTIOUS DISEASES NOTIFIED DURING THE YEAR 1909—

DISEASE	All Ages	Under 1	1—5	5—15	15—25	25—65	Over 65
Diphtheria and Mem- branous Croup ...	15	—	4	7	3	1	—
Erysipelas	18	—	—	3	3	10	2
Scarlet Fever	186	—	57	123	4	2	—
Enteric Fever	16	—	—	7	2	7	—
Puerperal Fever	2	—	—	—	—	2	—
Total	237	—	61	140	12	22	2

Return of Infectious Diseases notified, shown in the various Wards in which they occurred for the year 1909.

WARD	Enteric Fever	Scarlet Fever	Erysipelas	Diphtheria	Puerperal Fever	Totals
Farnworth	2	17	2	5	0	26
Halton.....	0	21	3	4	0	28
Simms Cross	7	28	7	1	0	43
Victoria	6	27	4	2	2	41
Waterloo.....	0	35	1	2	0	38
West Bank	1	58	1	1	0	61
	16	186	18	15	2	237

Return of Infectious Diseases notified during the various months of year 1909:—

DISEASE	January	February	March	April	May	June	July	August	September	October	November	December	Total
Scarlet Fever	5	10	18	19	24	30	13	11	17	7	24	8	186
Enteric Fever	1	—	—	—	—	1	2	—	6	—	—	6	16
Diphtheria and Membranous Croup ...	1	—	—	5	—	1	1	2	2	—	3	—	15
Erysipelas	—	2	2	—	2	4	2	3	—	—	2	1	18
Puerperal Fever	—	—	—	—	—	—	2	—	—	—	—	—	2
Totals.....	7	12	20	24	26	36	20	16	25	7	29	15	237

ISOLATION HOSPITAL ACCOMMODATION—

The Isolation Hospital at Crow Wood has accommodation for forty patients and consists of two large wards for Enteric cases, a Scarlet Fever block, two observation wards, discharging block, administrative block, with laundry, disinfecting station, mortuary, etc.

The wards are up-to-date, and a permanent Nursing Staff, consisting of Matron, 2 Charge Nurses, and 4 Nurses is provided. All patients have their own medical advisers. There is also a Small-pox Hospital situated at Barrow's Green. This is a wooden building on a brickwork foundation, and at present can accommodate eight patients. The foundations of another ward have been laid so that the erection of a building similar to the existing one can be quickly arranged if necessary.

The Small-pox Hospital was last used in 1902.

The following table shows the number of patients treated in Hospital during the year:—

	Enteric Fever	Scarlet Fever	Diphtheria	Total
In Hospital, Dec. 31st, 1908	3	5	0	8
Admitted during 1909	16*	176	3	195
Died	3*	5	0	8
Remaining in Hospital Dec. 31st, 1909	6	14	0	20

* One case afterwards proved to be Meningitis.

SCARLET FEVER—

A large number of cases of Scarlet Fever were notified during the year, viz., 186. Most of the cases (123) were of children between five and fifteen years of age, while 57 were between one and five years of age. I have tabulated the number of cases notified and the deaths resulting from same for each year since 1899,

Table showing Scarlet Fever cases notified and deaths resulting therefrom for ten years—1899-1908:—

	Cases	Deaths
1899	211	11
1900	158	7
1901	35	3
1902	75	2
1903	231	7
1904	58	1
1905	82	11
1906	57	3
1907	41	2
1908	78	—

It will be seen from the table that in some years very few cases are notified, while at intervals of four or five years, a large number of cases occur. This is exactly what happens all over the country, and although the number of cases does not appear to diminish, the mortality is very much less. Out of the 186 cases there were five deaths, a case mortality of 2.6 per cent., all occurring in children under five years of age.

The 186 cases were spread over the whole year as follows:—

Jan.	Feb.	Mar.	April	May	June
5	10	18	19	24	30
July	Aug.	Sept.	Oct.	Nov.	Dec.
13	11	17	7	24	8

All cases were investigated and all precautions taken to prevent the spread of the disease. One hundred and seventy-six of the children attacked were removed to the Isolation Hospital; clothes, bedding, and rooms were disinfected, and instructions given as to the exclusion of remaining children from school.

The Director of Education and Head Teachers were notified of each case and also when contact children could return to school with safety.

It was very difficult in many cases to determine how the infection had been communicated, and school children were inspected in order to find out any missed cases.

Two children suffering from the disease and, of course, in an infectious state, were discovered and at once isolated.

No infection could be attributed to the milk supply.

DIPHTHERIA—

Fifteen cases of Diphtheria were notified during the year, five of the cases occurring during the month of April.

There was one death due to the disease as compared with two deaths out of twelve cases in 1908.

Three of the cases were treated in Hospital, and in many of the cases bacteriological examinations confirmed the diagnosis. A supply of anti-toxin for the treatment of this disease is kept at the Town Hall, Police Station, and Isolation Hospital, so that at any time it is available for use and can be administered in the earliest stages. During the year ten bottles of anti-toxin have been used, equalling 20,000 units.

ENTERIC FEVER—

Sixteen cases of Enteric Fever were notified during the year, and two deaths occurred. One case which was notified and removed to the Hospital afterwards proved to be Meningitis, and death was certified to be due to that disease. I may say that in the early stages there is very great similarity in the two diseases.

We have had, therefore, only fifteen cases of Enteric, exactly the number which occurred in 1907, a year which had the lowest number of cases for eighteen years. In 1908 there were 44 cases and five deaths. All cases were treated in Hospital. During the autumn, a period in which we particularly look for Enteric Fever, there were only nine cases, and the number was only raised to fifteen in December by six cases occurring, five of these being in two adjacent houses.

There is no doubt that this comparative immunity from the disease is due largely to the weather which prevailed. A wet and cold summer is found to be unfavourable to the occurrence of the disease probably (1) because the growth of the germ in privy middens, etc., is inhibited by the wet and cold, and (2) there are fewer flies to carry germs from infected material into houses.

Lately a great deal of work has been done in connection with what are called "carriers" of Enteric Fever. It has been found that a person who has contracted Enteric, who recovers and is apparently well, is nevertheless a centre of infection. The germs remain in various organs of the body and are excreted principally in the urine, so that for years, unless some treatment is carried out, the person is a danger to the community. Various epidemics of Enteric have been conclusively proved to have arisen from such "carriers," and the question is a very important one to a Borough where there are many privies. It can be easily understood that such a "carrier" using a privy daily, infects its contents, and so creates a centre of infection which is extremely serious.

This is one of the great dangers of privy middens and explains the necessity of dealing with their conversion into water closets.

Disinfection of yards and back passages is regularly carried out in the summer time, and no doubt goes a long way in preventing Diarrhoeal Diseases, including Enteric Fever.

It is, however, noticeable, as I have already mentioned, that a wet summer has a very great effect in diminishing these diseases, and I am inclined to think that a frequent watering of yards, privies, and back passages would give almost as good a result as the use of disinfectants. The rapid removal and destruction of horse dung and other manure in which flies breed readily, is an important adjunct in dealing with the prevention of these diseases.

The following table shows the distribution of Enteric Fever in the various Wards since 1890.

	Farnw'th	Halton	Simms Cross	Victoria	Waterloo	West Bank	Total
1890	1	28	8	23	33	12	105
1891	3	11	14	18	10	12	68
1892	1	21	23	17	22	19	103
1893	6	38	60	26	22	30	182
1894	3	28	15	19	16	27	108
1895	—	13	8	9	13	9	52
1896	8	18	15	35	81	57	214
1897	5	6	23	8	24	10	76
1898	8	13	15	19	62	18	135
1899	2	24	33	33	29	7	128
1900	8	7	14	4	6	1	40
1901	4	23	20	19	34	11	111
1902	8	4	16	5	8	5	46
1903	8	3	15	7	12	3	48
1904	—	—	7	9	20	5	41
1905	5	18	20	12	15	4	74
1906	6	12	26	14	6	3	67
1907	—	—	5	6	2	2	15
1908	1	6	10	13	1	13	44
1909	2	—	7	6	—	1	16
	79	273	354	302	416	249	1673

ANALYSIS OF ENTERIC FEVER IN THE SEVERAL WARDS DURING 1909.

Farnworth—

	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 & over	Total
Cooper Street, 34	1	...	...	...	1
Farnworth Street, 62	1	...	1
	1	...	1	...	2

Farnworth Ward—2 Cases.

Halton Ward—

Halton Ward—Nil.

Simm's Cross Ward—

Dickson Street, 32	...	...	...	...	1	...	1
Lugsdale Road, 124	...	...	...	...	1	...	1
Widnes Road, 61	...	...	...	...	1	...	1
Deacon Road, 3	...	...	1	...	...	...	1
Hughes Street, 16	...	...	1	...	...	...	1
Gladstone Street, 4	...	...	...	...	1	...	1
Princes Street, 31	...	...	1	...	...	...	1
	...	...	3	...	4	...	7

Simm's Cross Ward—7 Cases.

Victoria Ward—

Eleanor Street, 32	...	...	2	1	2	...	5
(3) 34 (2)	...	...	...	1	...	...	1
Witt Road, 19	...	...	...	1	...	...	1
	...	...	2	2	2	...	6

Victoria Ward—6 Cases.

Waterloo Ward—

Waterloo Ward—Nil.

West Bank Ward—

Davies Street, 21	...	...	1	...	...	...	1
	...	...	1	...	...	...	1

West Bank Ward—1 Case.

Total No. of Cases—16,

MEASLES—

This not a notifiable disease, so that no record is obtainable of the number of cases. Sixteen deaths, however, were certified as being due to Measles.

The disease became epidemic in the last few weeks of the year in the West Bank District. It was not necessary to close any School as the Christmas Holidays were at hand.

As mentioned in another part of this report, it is extremely important to prevent this disease in children under five years of age, as the case mortality is very great in children at that period of life. I find, however, that it is extremely difficult for isolation to be carried out in the smaller houses. Without any overcrowding there are often a number of children who are obliged to sleep in one room, and once the disease is introduced it is not long before the other children are attacked. Greater care can however be taken after the acute symptoms have passed. Many children are allowed to be up and even outside as soon as the rash has disappeared. This is simply inviting an attack of Bronchitis or Pneumonia, and there is no doubt that many deaths of young children certified as due to one or other of these diseases are really traceable to Measles and want of care afterwards.

In connection with Measles I may mention that arrangements have been made with the Education Committee by which the Head Teachers and Attendance Officers notify me at once of any case of minor infectious disease. This includes Measles, Whooping Cough, Mumps, Chickenpox, Ringworm, Sore Eyes (Ophthalmia). This is in accordance with a Memorandum recently issued by the Board of Education, and will no doubt tend to give greater facilities for preventing the spread of these diseases.

TUBERCULOSIS—

There were 44 deaths from Tuberculosis of all kinds during the year; 32 of these being due to Phthisis or Tuberculosis of the Lungs.

Phthisis is not yet a notifiable disease, except in the case of Poor Law patients. During the year ten cases of Phthisis were notified by the District Medical Officers, while three notices of change of address were notified by the Relieving Officers. In these cases the house is visited, and if, as is generally the case, the patient has been removed to the Hospital, disinfection of the room or rooms is carried out. The same applies where change of address is notified, and disinfection is carried out before a new tenant enters the house.

SECTION IV.

SPECIAL SANITARY AND OTHER MATTERS.

WATER SUPPLY—

The water supply of the Borough is a very excellent one. The Corporation possess three deep wells from which a very plentiful supply of pure water is obtained. The water is simply pumped from the wells to the reservoir at Pex Hill, no treatment being required before use. As sanitation depends to a great extent on a good supply of water the Borough is very fortunate in being in possession of these wells.

I append the latest analysis of the water supplied to me by Mr. I. Carr, M.I.C.E., Gas and Water Engineer.

Analysis of water from Stocks Well and Netherley by Prof. Campbell Brown:—

	STOCKS WELL		NETHERLEY	
	In parts per 100,000		In parts per 100,000	
	1909	1908	1909	1907
Total solid matter in solution	15·800	16·800	16·600	14·000
Oxygen required to oxidise in 15 minutes...	·000	·006	·000	·000
Oxygen required to oxidise in 3 hours ...	·000	·015	·000	·000
Ammonia	·002	·000	·000	·000
Ammonia from organic matter by distillation with alkaline permanganate ...	·004	·000	·000	·000
Nitrogen as Nitrates... ..	·262	·196	·437	·328
Combined Chlorine	2·000	2·000	2·400	2·300
Permanent Hardness	1·00	2·71	2·15	2·28
Temporary Hardness	8·14	6·86	8·00	7·43
Total Hardness	9·14	9·57	10·15	9·71

FOOD AND DRUGS ACTS—

Proceedings under these Acts are taken by the County Police, and I am indebted to Mr. Superintendent Strickland for the following Report of Analyses and proceedings taken.

Return of Samples taken under the Food and Drugs Acts, in the Borough of Widnes, for year ending 31st December, 1909.

No.	Date of Purchase.	Nature of Sample.	Result of Analysis.
1	11th Jan. 1909	New Milk	Genuine.
2	do.	New Milk	do.
3	do.	New Milk	do.
4	do.	New Milk	2.80 per cent. fat. 8.93 „ other solids
			11.73 total solids and that it is deficient in cream. (No proceedings taken).
5	do.	Butter	Genuine.
6	do.	Irish Whiskey	do.
7	do.	Scotch Whiskey	do.
8	do.	Beer	do.
9	do.	Irish Whiskey	do.
10	do.	Lard	do.
11	do.	Butter	do.
12	do.	Skimmed Milk	do.
13	do.	New Milk	do.
14	11th March, 1909	Butter	do.
15	do.	Irish Whiskey	do.
16	do.	Scotch Whiskey	do.
17	do.	Rum	do.
18	do.	Lard	do.
19	do.	Coffee	do.
20	do.	Butter	do.
21	do.	New Milk	do.
22	do.	New Milk	do.
23	do.	New Milk	do.
24	do.	New Milk	do.
25	do.	New Milk	do.
26	do.	New Milk	do.
27	5th May, 1909	Irish Whiskey	do.
28	do.	New Milk	do.
29	do.	New Milk	do.
30	do.	Rum	do.
31	do.	Irish Whiskey	do.
32	do.	New Milk	do.
33	do.	New Milk	do.
34	do.	Butter	do.

No.	Date of Purchase.	Nature of Sample.	Result of Analysis.
35	do.	Cheese	do.
36	do.	Coffee	do.
37	do.	New Milk	do.
38	do.	Lard	do.
39	do.	New Milk	do.
40	do.	New Milk	do.
41	12th July, 1909	New Milk	do.
42	do.	Butter	do.
43	do.	Irish Whiskey	do.
44	do.	New Milk	2.76 per cent. fat. 8.49 „, other solids
			11.25 „, total solids and that it is de- ficient in cream. (No proceedings taken). Genuine.
45	do.	New Milk	do.
46	do.	Lard	do.
47	do.	Scotch Whiskey	do.
48	do.	New Milk	do.
49	do.	White Pepper	do.
50	do.	New Milk	do.
51	do.	Coffee	do.
52	do.	New Milk	do.
53	do.	New Milk	do.
54	3rd Sept., 1909	Butter	do.
55	do.	New Milk	do.
56	do.	Lard	do.
57	do.	White Pepper	do.
58	do.	New Milk	do.
59	do.	New Milk	do.
60	do.	New Milk	do.
61	do.	Irish Whiskey	do.
62	do.	New Milk	do.
63	do.	Gin	do.
64	do.	New Milk	do.
65	do.	Coffee	do.
66	do.	Irish Whiskey	do.
67	4th Nov., 1909	New Milk	do.
68	do.	Butter	do.
69	do.	New Milk	do.
70	do.	New Milk	do.
71	do.	New Milk	do.
72	do.	Lard	do.
73	do.	Cheese	do.
74	do.	New Milk	do.
75	do.	Butter	do.
76	do.	Irish Whiskey	do.
77	do.	Rum	do.

No.	Date of Purchase.	Nature of Sample.	Result of Analysis.
78	do.	Gin	do.
79	do.	New Milk	do.
80	9th Dec., 1909.	Margarine	do.
81	do.	Margarine	do.
82	do.	Irish Whiskey	do.
83	do.	Rum	do.
84	do.	Irish Whiskey	do.
85	do.	Margarine	do.
86	do.	Margarine	do.
87	do.	Margarine	do.
88	do.	Margarine	do.
89	do.	New Milk	do.
90	do.	New Milk	do.
91	do.	New Milk	do.

DAIRIES, COWSHEDS, AND MILKSHOPS—

There are twenty-five Cowsheds on the Register and fourteen of these are in actual use.

During the year these have been visited, and in some cases alterations have been carried out in order to comply with the requirements of the Regulations.

There are still some alterations to be completed, and the owners have promised to deal with these as soon as possible. I am pleased to say that one Cowshed which was in a very bad condition has now been so altered that it will compare very favourably with the best.

There is great difficulty in getting these alterations done, as farmers will not or cannot see the good which will be the result. What has been good enough for their relatives in the past is apparently good enough for them.

One of the greatest mistakes that is made is to imagine that a dark and warm (or close) shippon is necessary for the production of good milk.

Ventilation is described as “a draught” which will cause the cows to give less milk, whereas it is well-known that fresh air and light will certainly improve the cows in every way, and if generally adopted would tend to diminish the large amount of Tuberculosis present among dairy cattle.

The number of Milk Shops on the Register is 53. These are regularly inspected and are now being kept in accordance with the Regulations.

SLAUGHTERHOUSES--

There are seven Slaughterhouses on the Register, but there is not a great deal of slaughtering done in the Borough. All have been frequently inspected.

ICE CREAM SHOPS—

There is one Ice Cream Manufactory in the Borough. It has been inspected, as under the Widnes Corporation Act, 1908, we have powers to enforce cleanliness, etc.

COMMON LODGING-HOUSES—

There are four Common Lodging-Houses in the Borough, three of which are for Males only. The remaining one is a lodging-house for both sexes.

OFFENSIVE TRADES—

There are two works which manufacture manure from offal. These works are fitted up so as to cause as little offence as possible. There are 36 fried fish shops in the Borough, and these are visited regularly.

CANAL BOATS—

The Inspector of Nuisances is the Inspector of Canal Boats, and appends his report on his work under The Canal Boats Acts to his Annual Report.

I take this opportunity of saying that the Nuisance Inspector and the Staff of the Department generally, carry out their duties very satisfactorily.

REFUSE REMOVAL—

This work is carried out by the Council and is supervised by the Health and Highway Committees.

Most of the Borough is well drained and sewered, the sewage passing into the estuary of the Mersey. The sewers are well ventilated by shafts and manholes and are regularly flushed.

There are a large number of privy middens in the Borough, the contents of which are removed and placed on the tip in Moor Lane or disposed of to farmers as manure. The conversion of privies to w.c.'s would, of course, do away with the tip, but there would still be a large amount of dry refuse from ashbins, etc., which would have to be disposed of. This could only be satisfactorily accomplished by providing a destructor. All new houses are, of course, provided with w.c.'s, and now ashbins are being insisted upon instead of ashpits. There are roughly about 400 ashbins, and these are emptied (in the day time) once a week. There is, of course, no question as to the most sanitary method of refuse disposal—ashpit or ashbin. In the one case the refuse is allowed to lie for some time in a decaying state and open to receive visits from flies which carry filth into articles of food, etc. In the other we have a covered bin, which only holds a small quantity of refuse, and which is easily collected and emptied.

I should like to point out, however, particularly to users of bins, that they are not meant to receive all kinds of refuse. They are really meant for ashes and other inorganic matter. Vegetable refuse, such as potato peelings, cabbage leaves, etc., should be put at the back of a fire and burnt.

INSANITARY PROPERTY—

At the end of the year action was commenced under the Housing of the Working Classes Act, with regard to property in Brynn Street. Houses left untenanted were practically gutted, and the yard walls, privies, etc., demolished. I certified these houses as being in an insanitary state, and notices have been served on the owners.

NUISANCES—

Three hundred preliminary notices, which included 676 nuisances, were issued. It was not found necessary to take proceedings in any case.

FABRIC AND WORKSHOP ACT—

In compliance with Section 132, I have to report on the administration of the above Act, and also send a copy of the report to the Secretary of State. A Register is kept of all factories and workshops and from the tabulated statement it will be seen that there are 124 registered workshops in the Borough and these include 24 bake-houses and 8 laundries.

1.—INSPECTION.

Including Inspection made by Sanitary Inspectors or Inspectors of Nuisances.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories.....	58	11	Nil
Workshops.....	124	24	Nil
Workplaces	10	2	Nil
Total.....	192	37	...

2.—DEFECTS FOUND.

Particulars	Number of Defects		
	Found	Remedied	
Want of cleanliness	7	7	
Other nuisances	18	18	
Sanitary accommodation	insufficient	4	2
	unsuitable or defective	2	2
	not separate for sexes.		
Offences under the Factory and Workshops Act—			
Illegal occupation of underground bakehouse (s. 101)	None in the Borough		
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	5	5	
Other offences	1	1	
Total	37	35	

3.—HOME WORK.

Nature of Work	Lists received from Employers		Numbers of Addresses of Outworkers received from other Councils	Number of Inspections of Outworkers' premises
	Twice in the year			
	Lists	Outworkers		
Wearing Apparel— Making, etc. ...	6	12	2	14
File Making ...	2	6	2	4
Total ...	8	18	4	18

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
General	3
Plumbers	3
Brass Founder	1
Joiners	5
Wearing Apparel	1
Weighing Machine Makers	3
Blacksmiths	4
Wheelwrights	3
Confectioners	5
Ice Cream	1
Chemical Apparatus	1
Rag Sorters	2
Tin Smith	1
Cycle Makers	3
Laundry	8
Cabinet Makers	1
Cooperage	2
Cloggers	4
Tool Makers	4
Shoe Makers	9
Brickmakers	1
Saddlers	2
Tailoring	4
Dressmaking	22
Millinery	7
Bakehouses	24
Total number of workshops on Register	124

5.—OTHER MATTERS.

Class.	Number
Action taken in matters referred by H.M. Inspector as remedi- able under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	Notified by H.M. Inspector 15

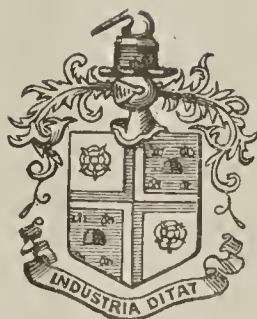
ACCIDENT HOSPITAL—

Patients in Hospital Dec. 31st, 1908.....	9
Admitted during 1909	72
Deaths	8
Patients in Hospital Dec. 31st, 1909.....	8
Out-patients	282
Operations on In-patients	6
Operations on Out-patients	12

The work of this Hospital continues to be carried on in a very satisfactory manner.

I should here remark that during the year the Corporation have built and equipped a new Public Mortuary, which is situated in Moor Lane. This is very satisfactory as, formerly, bodies were taken to the Mortuary of the Accident Hospital, where there is no proper accommodation.

The new Mortuary comprises the Mortuary proper, a Post-Mortem Room, and a separate corridor, in which juries and other persons may view bodies without having to be in the Mortuary itself.



BOROUGH OF WIDNES

REPORT

OF THE

Inspector of Nuisances

for the year 1909

WIDNES :

EXORS. T. S. SWALE, "Weekly News" Office, 35, VICTORIA ROAD

Borough of Widnes

REPORT OF THE SANITARY INSPECTOR FOR THE YEAR ENDING
DECEMBER 31ST, 1909.

*To the Chairman and Members of the Health Committee
of the Widnes Town Council.*

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit to you my Nineteenth Annual Report upon the work done in connection with my department during the year 1909, and in doing so wish at the outset to thank you all again for the kind and patient consideration you have extended to me in carrying out these duties. The following pages indicate as briefly as circumstances will permit the work done.

TABLE I.

Number of Preliminary Notices Served	300
„ Seven days' Notices	17
„ Repeat Notices drawing attention to nuisances.....	77
„ Summonses taken out for non-compliance	—
Notices not complied with	—
Re-inspections made	600
Total No. of Nuisances	782

TABLE II.

Summary of Nuisances Registered and Abated.

Yard Pavement, relaying or repairing	21
Properly constructed channel to be formed in yard pavement.....	6
Drains re-laid	5
Choked Drains	80
Defective Gullies	27
Disconnect S.W.P. from drain	1
Defective Slopstones	6
Absence of Slopstone	1
Defective Slopstone Waste Pipes	1
Defective Wash-house Floor	1
Cellar Flooded	4
Defective Cellar Pavement	1
Filth in Cellar	1
Foul Cesspool filled up	2
Foul Privies converted into W.C.'s	32
Defective Privy Walls	93
Re-lay Closet Floor	6
Defective Closet Riser	12
Provide Slopset Seat	3
Defective Closet Roofs	12
Choked and Defective W.W.C.'s	33
Provide New Tippers	6
Defective W.C. Pedestal	2
Moveable Receptacles in place of Ashpit	9
Defective House Roofs	21
Defective Plaster on House Walls	20
Choked and Defective Eave Gutters and Down Spouts	16
Absence of Window Cords	10
Defective House Floors	3
Houses cleansed by Limewashing	20
Overcrowding	14
Dirty Yards	7
Accumulation of Chaff	2
Foul Ditch	1
Choked and Defective Fresh W. Closets	13
Fowls kept	9
Bell Trap Removed	1
Intimations to Borough Surveyor <i>re</i> Choked W.W.C.'s	124
Notices <i>re</i> Dirty Yards, etc.	129
Notices <i>re</i> Wet Privies	2
Notices <i>re</i> Houses Let in Lodgings	7
Do. Common Lodging Houses	2
Notice under Sec. 5, Infectious Diseases (P) Act, 1890	20
Reports to Town Clerk	1
Post Cards	148
Letters	755

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER, 1885,
AND REGULATIONS MADE BY THE LOCAL AUTHORITY, 1907.

DAIRIES AND MILKSHOPS—

The number of these at 31st December, 1909, was 53, as compared with 48 in 1908, being an increase of five. The majority of these premises continue to be kept in accordance with the Dairies, Cowsheds and Milkshops Orders, and Regulations made thereunder. Only four contraventions were met with.

An endeavour has been made during the year to induce the purveyors to adopt the use of dust excluding covers for Counter and Stock Vessels. This has met with ready response on the part of many purveyors; while others have shown an apathy and indifference to the potential danger of dust and flies obtaining access to milk, difficult to account for.

COWSHEDS—

The total number of Cowsheds in the Borough is 25, but only fourteen are in actual use. Six persons keep a cow each for personal use.

There are still one or two cowkeepers who have not as yet fully complied with the notices calling upon them to conform to the Regulations. I hope, however, that the notices will be complied with during the present year.

The total cubic capacity of the fourteen Cowsheds admits of 77 cows being kept. The average number of cows kept is 74.

MILK SUPPLY (TUBERCULOSIS)—

WIDNES CORPORATION ACT, 1908, PART VII.—

Copies of this Section were delivered to and signed for by the several Cowkeepers residing outside the Borough, who purvey milk within the Borough.

ICE CREAM—

WIDNES CORPORATION ACT, 1908—

There is one Ice Cream manufactory, which is so situated as not to contravene the Act.

Only a close and frequent inspection secures an adequate degree of cleanliness in the shops where this commodity is sold.

SLAUGHTERHOUSES—

There are within the Borough seven Licensed Slaughterhouses, the use of three having been discontinued during the year.

The premises have been regularly visited and upon inspection have been found clean and fairly well kept.

Two Slaughterhouses were in existence prior to the Act of 1875.

A large amount of meat is brought from the Liverpool Abattoirs, hence the decrease in the number of private Slaughterhouses.

COMMON LODGING-HOUSES—

The number of Common Lodging Houses is four, three taking in Males only. The four houses provide accommodation for 176 persons.

I am pleased to report that the notice posted in the several Common Lodging Houses re spitting and smoking in bedrooms, has effected a great improvement in cleanliness.

The supply of disinfectants for the washing of floors and bedding also materially assists in keeping the rooms sweet and clean.

No infectious disease has been notified from any of the houses.

Two contraventions were dealt with.

HOUSES LET IN LODGINGS—

There were 29 on the Register at the commencement of the year, four were registered during the year, and two struck off, making the total number on the Register 31.

ALKALI WASTE DEPOSIT CULVERTS—

During the year the Birch House Culvert again became choked owing to crystallisation of alkali liquor. The matter was remedied by the several owners.

OFFENSIVE TRADES—

There are two tripe boiling establishments in the Borough, but no complaints have been received regarding them. The work appears to be carried out with due precaution.

Messrs. J. P. Dean and Co., The Marsh—

The work here has evidently been carried on with every care. On each visit the works were found satisfactory, and I have not received any complaints respecting same.

Messrs. The Fleetwood Chemical Co.—

The character of the manufactures at this works has almost entirely changed, Pith and Size being now the chief productions.

The works were burnt to the ground in September last, but are now being rebuilt.

FRIED FISH AND CHIPPED POTATO SHOPS—

Thirty-six Fried Fish and Chipped Potato Shops are on the Register. On inspection of these shops particular attention is paid to the following points:—

- 1.—Cleanliness of premises and utensils.
- 2.—Method of conveying fumes.
- 3.—Condition and quality of materials used.
- 4.—Disposal of refuse.

In two instances the shops were found to be dirty, and on my recommendation were limewashed.

The majority of the stoves are fitted with hoods or improved flues. Lard is chiefly used for cooking purposes. The refuse is taken away each day by the Corporation cart.

THE TOWNS POLICE CLAUSES ACT 1847, SEC. 28 and PUBLIC HEALTH ACTS AMENDMENT ACT 1907, PART VIII—

A fish dealer was prosecuted for throwing offal in the street, and was fined 5s. and costs.

ELEMENTARY SCHOOLS—DISINFECTION—

During the Whitsuntide Holidays all the Elementary Schools were fumigated.

West Bank Council School was also disinfected by spraying the walls during the Christmas Holidays.

UN SOUND FOOD—

The following articles of unsound food were destroyed:—Rabbits five, Apples 806lbs., Pears 422lbs., Onions 676lbs., Lemons 126, Tomatoes 84lbs., Plums 67lbs., Whimberries 19lbs., Cabbages 12doz., Oranges 984.

SANITARY IMPROVEMENTS—

Owing to the private sewer in Walmsley Street, to which are also connected the private sewers from Bedford Street and Grove Street, having originally been laid in alkali waste, the alkali liquor had percolated through the joints and become crystallised, thus completely choking the sewer. This necessitated the whole of the sewer being reconstructed with nine inch earthenware pipes. The cost of the work was paid by the several owners.

Privies at the following premises have been converted to the water carriage system:—

- 1, 3, 5, and 7, Barrow's Row, Farnworth.
- 28, 30, 75, 77, and 79, Victoria Road.
- 21, Ann Street.
- 9 and 11, Catherine Street.
- 28 and 30, Widnes Road.
- 7, 9, and 11, Oakland Street,
- 52, Waterloo Road,
- and 29 and 31, Milton Street.

NEW HOUSES ERECTED IN THE BOROUGH DURING 1909—

Seventy-two new houses have been erected during the year, the drainage of all being on the water carriage system.

Information with regard to the management of Water Closets and Sanitary matters generally has been posted on the closet doors.

OVERCROWDING—

Fourteen cases of overcrowding were met with. A number of these cases consisted of large families who were in poor circumstances.

INFECTIOUS DISEASES—

Visits were paid to the houses in which cases of Infectious Disease occurred, and inspections made as to the sanitary condition of the various premises.

Attention was also paid to the disinfection of the Premises, Bedding, and Clothing.

The following nuisances were found to exist at houses in which Infectious Diseases occurred.

Dirty Houses	8
Foul Privy	1
Defective Yard Pavements	4
Defective Roofs	3
Defective Waste Pipe	1
Defective Eave Gutters	1
Defective Closet Riser	1
Defective Soil Pipe Connection	1
Defective Scullery Floor	1
Defective Privy Walls	1

Particulars of Articles removed for disinfection during the year:

Beds	208
Sheets	253
Blankets	301
Quilts	250
Pillows	372
Pillow Slips	404
Miscellaneous	1548
	<hr/>
	3336

As in previous years and by order of the Committee, I had the privies, yards, and passages in West Bank, Waterloo, Victoria, Simm's Cross, and Halton Wards sprayed with a strong solution of Chloros during the summer months.

SMOKE TESTS—

Smoke tests were applied in several cases during the year and revealed a number of defective soil pipes, which have since been put in order.

SANITARY CONVENIENCES IN THE BOROUGH—

Number of Dry Ashpits	2,112
Number of Houses with Ashbins	380
Number of Privies	4,176
Number of fresh water closets	1,311
Number of waste water closets	1,349
Number of latrines trough closets, etc., at factories and workshops	72

FACTORY AND WORKSHOP ACTS—

There are 58 factories in the Borough; 46 are provided with sanitary accommodation on the water carriage system and in accordance with the Sanitary Accommodation Order of 4th February, 1903, issued by the Home Secretary.

HOMEWORK—

Five local firms* and four firms outside the Borough, employ eighteen outworkers in the Borough. One workroom was found to be dirty and in another case the walls were damp.

There are 124 Workshops in the Borough.

The following Factories employ female labour:—Messrs. Greenway Bros., Messrs. Gossage & Sons, Messrs. Swale, Mr. A. Edwards, Mr. W. Williams, and Messrs. Henry & Co. Separate Sanitary Accommodation is provided for each sex.

Eight contraventions were met with in Bakehouses and 29 in other Workshops.

CANAL BOATS ACTS—

I annex copy of my Annual Report to the Local Government Board as to the execution of the Canal Boats Acts 1877 and 1884, for the year 1909.

I beg to remain, Gentlemen,

Your obedient servant,

W. LOWE,

BOROUGH OF WIDNES.

 ANNUAL REPORT AS TO THE EXECUTION OF THE CANAL
BOATS ACTS 1877 and 1884, FOR THE YEAR 1909.

INSPECTION OF BOATS—

The Inspection of Canal Boats is undertaken by the Inspector of Nuisances (Mr. Walter Lowe, Town Hall, Widnes), no salary being paid.

NUMBER OF BOATS INSPECTED—

The number of Boats inspected during 1909 was 63, the condition of the boats and their occupants as regards the matters dealt with in the Acts and Regulations, is indicated by the following information.

AS TO INFRINGEMENTS OF ACTS AND REGULATIONS—

The following are the particulars of Infringements of Acts and Regulations during the year:—

(a) Registration	Two.
(b) Notification of Change of Master...	None.
(c) Certificates	One.
(d) Marking	One.
(e) Overcrowding	One.
(f) Separation of Sexes	None.
(g) Cleanliness	None.
(h) Ventilation	None.
(i) Painting	Three.
(j) Provision of Water Cask	None.
(k) Removal of Bilge Water	None.
(l) Notification of Infectious Disease...	None.
(m) Admittance of Inspector	None.

LEGAL PROCEEDINGS—

No legal proceedings were taken.

CASES OF INFECTIOUS DISEASE—

No case of Infectious Disease was met with, nor was any boat detained for cleansing and disinfection.

NUMBER OF BOATS ON REGISTER—

The number of Boats on Register is 147.

NUMBER OF BOATS REGISTERED 1909—

One Boat was Registered during the year owing to change of Ownership.

(Signed) WALTER LOWE,

Inspector of Nuisances.

Nuisance Inspector's Department,
Town Hall, Widnes,
December 31st, 1909.

Borough of Widnes

EDUCATION (ADMINISTRATIVE PROVISIONS) ACT 1907.

REPORT ON THE MEDICAL INSPECTION OF
ELEMENTARY SCHOOL CHILDREN FOR YEAR
ENDING DECEMBER 31st, 1909.

*TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION
COMMITTEE.*

MRS. NEIL AND GENTLEMEN,—

I have the honour to present to you my Second Annual Report on the Medical Inspection of School Children. At the outset it may be as well to again give some idea of the scope of the work already done and that which is contemplated in the future.

Since the passing of the Education (Administrative Provisions) Act, 1907, the Board of Education have issued several circulars (Nos. 576, 582, and 596), which contain instructions, etc., as to the working arrangements for the Medical Inspection of School Children.

Circular 576 deals with the Scope and Aim of the Act, Organisation, Subsidiary Agencies (such as Teachers, Parents, and School Nurses), the Character of the Inspections and Remedial Measures.

- 1.—The aim of the Act is “not merely to obtain a survey or record of defects, but the physical improvement, and as a natural corollary, the mental and moral improvement of coming generations.”
- 2.—The paragraphs on Organisation state that the work of Medical Inspection should be carried out in intimate conjunction with the Public Health Authorities, and under the direct supervision of the Medical Officer of Health.

This will afford Medical Officers of Health more opportunity to study the various conditions affecting the health of the community, and ought to provide a means of obtaining much information which formerly it was impossible to obtain.

3.—*Subsidiary Agencies*—

The Medical Officers are to be assisted in their work by parents, teachers, and school nurses. Parents are to be invited to the inspections, and will be able to give a good deal of information of value.

Teachers also are in a position to give valuable assistance from their daily knowledge, and observation of the children.

School Nurses are looked upon as being very important adjuncts in this work. I may here quote the circular with regard to School Nurses' duties, as they are very definitely laid down.

“The School Nurse may serve as a link between the school and the home, and can assist in recording the results of inspection, in securing and maintaining personal cleanliness, and in carrying out medical advice concerning simple ailments. She is also able to give counsel in the home. . . . It is essential, however, that the teacher, school nurse, or health visitor should act strictly under the instruction and supervision of medical authority.”

4.—*Regulations as to Inspections*—

Up to the present only children entering and those leaving school have been examined, but the idea when fully carried out is that every child shall be inspected not less than three times during school life.

The first inspection will take place when the child is first admitted. The second about the 3rd year (age 7 years), and the third about the 6th year of school life (age 10 years). Another inspection just before the child leaves school is also suggested.

As mentioned above, the Board of Education have been satisfied up to the present if those children entering and those leaving have been inspected, but no doubt inspections at other ages will be insisted upon very soon.

The inspections are to be carried out on school premises and during school hours. The details obtained by inspection are to be kept and are considered as confidential. A report by the School Medical Officer is to be presented annually to the Board.

Having set out the details of the scheme as laid down by the Board, I may now explain how the work has been carried on in this Borough during the year 1909. As before, I was appointed School Medical Officer to supervise the work of Inspection. The actual inspection was carried on by two medical inspectors, Dr. Lindsay

inspecting children in Simm's Cross Council, Warrington Road Council, Farnworth C.E., and Appleton R.C. Schools, while Dr. Edwards inspected the children in the remaining four schools, viz.: West Bank Council, Widnes C.E., St. Patrick's R.C., and St. Marie's R.C.

The work was carried out between 2 and 4 p.m. on certain afternoons per week. During this period of two hours it is possible to examine 15 to 18 children.

When senior scholars are to be inspected, the vision is tested, and consequently more time is taken up in these cases.

The School Nurse also assisted at these inspections, weighing and measuring the children, etc. Various appliances, including weighing and measuring machines and Sneilen's test cards, have been provided. The results of the examinations are noted on the card index system, each child having a card which is transferred with the child from one department to another, or if necessary from one school to another.

Before the inspection takes place notices are sent to the parents of those children who are to be examined. The parents are invited to attend and are requested to fill in on the form provided information as to the various infectious diseases from which the child may have suffered.

This is important as, if the parent cannot come to the inspection, the information is still obtained and a complete record made. As a matter of fact, in this Borough, a great proportion of mothers come to the Inspections and take a deep interest in them. The Inspectors are thus enabled to advise parents personally regarding any defects found.

All inspections have taken place on school premises, in most cases the teacher's room having been utilised for the purpose. Where no teacher's room is available a classroom is used.

After the inspections are completed, the information on the cards is entered in a Summary Sheet for office use and for convenience in preparing reports. Important defects discovered are also noted and filed for future reference, while parents who have not been present at the Inspections are notified of defects and suitably advised.

During the year all children entering school and all leaving were examined, a total of 1,326 children, 601 of whom were five years of age and 725 were thirteen years of age.

WORK OF THE SCHOOL NURSE—

This Borough was one of the first to provide a School Nurse, so that even before the Act came into force work was being carried out

in the schools. After the passing of the Act the Nurse assisted the Inspectors as before mentioned, and during the rest of the week was occupied in dealing with minor ailments.

Owing to the Nurse's resignation in August last, I was asked to report on the work of Medical Inspection generally, and the School Nurse's work, and Nurse Robinson was appointed in December.

The duties are now to assist at the Inspection, to visit the schools in order to inspect the children, and give advice as regards treatment, and also in exceptional circumstances to visit the homes to interview and advise parents.

A Register is kept for the Nurse's work, and a report thereof submitted monthly to the Committee. The work has been carried out very successfully.

From the foregoing it will be apparent that during 1909 all the requirements of the Board of Education have been carried out. Treatment of defects has not yet been attempted. All that is done is to give advice and there are a great number of cases in which treatment has been brought about in this way. It is yet too early to advise any extended scheme of treatment, and it will be well to wait until it is possible to see how much we are able to do under the present system.

I have arranged the results of the Inspections in tabular form showing the numbers examined, the defects found in each school and the percentage of defects found to children examined.

It will be seen that the total number of defects is very large, so large that it may appear that every child is defective. As a matter of fact, very few children are entirely free from a defect of some kind although it may be a somewhat trivial one. Again many children suffer from several defects which are closely related. For instance, a child may have a verminous head, which in turn will cause enlarged glands. If at the same time this particular child has defective vision (to take another common defect) then it will be seen that the number of defects may be very much greater than the total number of children examined.

To give another example of the same kind, a child may have Enlarged Tonsils, Adenoids, and Enlarged Glands. This state of things is exceedingly common. Perhaps the chief factor which contributes to the large number of defects is decayed teeth; all children having four or more carious teeth being classed as defective. It is therefore necessary in reading the tabulated statement to take the percentage of children suffering from each particular defect to the total examined. This gives a better idea of the numbers affected by each disease or defect.

Another table is added showing the various heights and weights of the children of Widnes compared with the heights and weights of artisans' children in towns. The latter are taken from the (1908) Report of the Chief Medical Officer to the Board of Education.

It is necessary to refer to some of the defects more particularly.

VERMINOUS AND DIRTY HEADS—

These occur principally among the girls, who are, of course, more liable owing to the hair being allowed to grow long. It would be much more sanitary to have girls hair cut short, at any rate during school life.

When children are found in this state the parent is supplied with a printed card giving instructions as to cleansing the head and directions for keeping it clean. I have seen great improvement in many cases during the last twelve months. As mentioned before, dirty heads give rise to other defects, such as Enlarged Glands.

DEFECTIVE TEETH—

This, of course, is the most common defect, and one which is, unfortunately, not confined to any one class of child. It has been found by the Medical Inspection that the teeth of most children in the country are not as they should be.

The generally accepted view at the present time is, that the defects in teeth are due to the use of the finely milled flour in modern bread. People will have their bread as white as possible, but get this at the cost of a good deal of nourishing material. Were whole meal flour and bread used instead of the pure white flour it is possible that the teeth would be more easily preserved.

Another factor in the decay of teeth is that very few children are taught to use tooth brushes. Out of a class of 40 or 50 children only five or six will be found to possess brushes. I have been enabled to secure, free of cost, 2,000 tooth brushes, and having received the Committee's sanction I propose to distribute them to the children in Standards I. and II., in the various schools, at the same time giving them some idea as to their use.

I hope by this means to get the children to use them regularly, and perhaps others in the homes will follow their example. This is an important matter as decaying teeth are not only bad in themselves, but cause many other diseases in after life.

DEFECTIVE VISION—

Only the older children are examined for vision, and they are tested by means of Snellen's test types at a distance of 20 feet. If the vision is found to be 6-12ths or less the child is marked as defective and the parents are advised to have the eyes thoroughly tested for glasses. There are, however, cases where the parents cannot afford to buy glasses.

INFECTIOUS DISEASES—

As before mentioned parents are asked to state, what infectious diseases their children have already contracted. I have tabulated the figures obtained in this way, and it will be seen that large numbers of children have had Measles before reaching the age of five years. By keeping a record of this kind one is enabled to ascertain what children need be excluded from school during epidemics.

When a child is notified (under the Infectious Diseases Notification Act) as suffering from an infectious disease, the Director of Elementary Education and Head Teacher of the School attended are notified of its occurrence, and similarly when a child leaves the Isolation Hospital, a notice is sent to the Head Teacher stating when the child may return to school. Lately, the Committee have allowed me to institute notification by the Head Teachers of children who are absent from school through any of the minor infectious diseases. This has already resulted in a great number of notifications being received, and it will undoubtedly be of great assistance.

RINGWORM—

This is a disease which causes an immense amount of trouble because children, quite well in other respects, have to be excluded from school.

It is moreover a disease, the treatment of which is rather unsatisfactory and slow, so that the child may be absent from school many weeks or months. This, of course, is a serious matter in connection with the school grant. Various methods of treatment have lately been adopted, and the one which seems to give the best and most rapid result is the X-ray treatment.

The whole head or part affected is subjected to the X-rays and after a short time the hair comes off and the disease is quickly cured. In many hospitals this treatment has been carried out with success and even some Education Authorities have adopted it, with the result that the children are not excluded from school for so long a time, and consequently there is a saving of grant.

Unfortunately, in this Borough we have no installation of X-ray apparatus with which to give the treatment a trial.

GENERAL HYGIENE OF THE SCHOOLS—

The general hygiene of schools continues to be good, although some of the older schools require alterations in certain respects. I visit the various departments at least once a quarter and have already made suggestions which for the most part have been or are to be carried out.

The sanitary arrangements at Warrington Road School were reported to the Sites and Buildings Committee and have since received attention.

Lighting has been improved in several schools, in one case prism glass being used with, I think, good effect.

The Board of Education requested a report on St. Marie's School. This was written and suggestions made regarding ventilation, lighting, and the sanitary arrangements. These suggestions are, I believe, to be carried out in a short time.

In conclusion, I should like to express my thanks to The Director of Elementary Education and his staff and also to the Head Teachers in the various Schools for the way in which they have rendered assistance and given me whatever information I required.

I am, Gentlemen,

Your obedient servant,

C. S. BREBNER.

CHILDREN AGED FIVE YEARS.

DEFECTS FOUND	Simm's Cross		Warrington Road		West Bank		Widnes C.E.		Farnworth C.E.		Appleton R.C.		St. Marie's R.C.		St. Patrick's R.C.	
	Number defective	Ratio per cent.	Number defective	Ratio per cent.	Number defective	Ratio per cent.	Number defective	Ratio per cent.	Number defective	Ratio per cent.	Number defective	per cent. Ratio	Number defective	Ratio per cent.	Number defective	Ratio per cent.
Clothing	29	14.5	11	13.9	...	...	...	...	3	8.3	11	24.4	...	...	2	3.5
Nutrition	41	20.5	19	24.	4	4	2	8	3	8.3	13	28.8	...	...	4	7.0
Dirty Heads	19	9.5	9	11.4	9	9	...	...	3	8.3	9	20.0	7	12.1	2	3.5
General Cleanliness ...	17	8.5	7	8.8	1	1	...	...	2	5.5	9	20.0	...	...	1	1.8
Teeth	75	37.5	32	40.5	64	64	8	32	14	38.8	20	44.4	15	25.8	26	45.6
Enlarged Tonsils	98	49.	35	44.3	30	30	14	56	18	49.9	22	48.8	17	29.3	22	38.6
Adenoids	51	25.5	15	19.	6	6	5	20	5	13.9	4	8.8	8	13.8	9	15.8
Enlarged Glands	107	53.5	30	38.	12	12	6	24	18	49.9	26	57.7	15	25.8	10	17.5
External Eye Diseases	27	13.5	7	8.8	8	8	3	12	2	5.5	8	17.7	8	13.8	4	7.0
Ear Diseases	6	3.	2	2.5	3	3	3	12	2	5.5	3	6.6	1	1.7	...	...
Hearing	23	11.5	6	7.6	4	4	1	4	2	5.5	5	11.1	3	5.2	3	5.3
Speech... ..	4	2.	1	1.2	2	2	...	...	1	2.7	...	...	...	...	...	...
Mental Condition ... ..	...	...	5	6.3	14	14	2	8	2	5.5	...	...	...	...	1	1.8
Disease of Heart	28	14.	10	12.6	4	4	...	...	3	8.3	5	11.1	4	6.9	2	3.5
Disease of Lungs	62	31.	25	31.6	1	1	3	12	...	...	5	11.1	4	6.9	1	1.8
Disease of																
Nervous System	2	1.	...	...	1	1	...	...	...	...	...	...	2	3.4	2	3.5
Tuberculosis	15	7.5	3	3.8	...	...	...	...	...	...	6	13.3	...	...	...	...
Rickets	53	26.5	26	32.9	1	1	...	...	6	16.6	14	31.1	...	...	...	...
Deformities, etc.	14	7.	5	6.3	...	...	...	...	4	11.1	4	8.8	1	1.7	...	...
Infectious or																
Contagious Disease	10	5.	10	12.6	2	2	...	...	1	2.7	1	2.2	...	...	...	...
Other Disease... ..	68	34.	25	31.6	2	2	2	8	8	22.2	20	44.4	1	1.7	3	5.3
Total Examined	209	...	79	...	101	...	25	...	36	...	45	...	58	...	57	...

CHILDREN AGED THIRTEEN YEARS.

DEFECTS FOUND	Simm's Cross		Warrington Road		West Bank		Widnes C.E.		Farnworth C.E.		Appleton R.C.		St. Marie's R.C.		St. Patrick's R.C.	
	Number Defective	Ratio per cent	Number Defective	Ratio per cent	Number Defective	Ratio per cent	Number Defective	Ratio per cent	Number defective	Ratio per cent	Number defective	Ratio per cent	Number defective	Ratio per cent	Number defective	Ratio per cent
Clothing	14	7.5	2	2.2	...	...	...	...	1	1.6	3	4.2	2	1.8	...	...
Nutrition	30	16	15	16.3	...	...	3	3.5	11	18.3	16	22.2	4	3.6	...	...
Dirty Heads	16	8.6	9	9.8	3	3.8	6	7.1	12	20.	15	20.8	15	13.6	8	20.
General Cleanliness	20	10.7	9	9.8	2	2.5	4	4.7	4	6.6	12	16.6	8	7.3	3	7.5
Teeth	108	57.8	44	47.8	21	26.6	58	68.2	20	33.3	26	36.1	78	70.9	17	42.5
Enlarged Tonsils	89	47.6	27	29.3	23	29.1	12	14.1	13	21.6	23	32.	34	30.9	11	27.5
Adenoids	37	19.8	11	12.	8	10.1	6	7.1	7	11.6	19	26.4	4	3.6	3	7.5
Enlarged Glands	31	16.6	4	4.3	4	5.1	2	2.4	4	6.6	13	18.1	11	10.	5	12.5
External Eye Diseases	21	11.2	14	15.2	7	8.9	7	8.2	2	3.3	7	9.7	9	8.1	3	7.5
Defects of Vision	57	30.5	19	20.7	10	12.7	23	27.1	7	11.6	12	16.6	34	30.9	6	15.
Ear Diseases	7	3.7	1	1.1	3	3.8	5	5.9	1	1.6	1	1.4	5	4.5	1	2.5
Hearing	18	9.6	3	3.3	3	3.8	3	3.5	5	8.3	5	6.9	1	.9	2	5.
Speech... ..	2	1.1	1	1.1	2	2.5	2	2.4	...	...	...	...	2	1.8	...	...
Mental Condition	20	10.7	10	10.9	5	6.3	2	2.4	8	13.3	17	23.6	4	3.6	2	5.
Disease of Heart	12	6.5	5	5.4	3	3.8	3	3.5	7	11.6	6	8.3	1	.9	1	2.5
Disease of Lungs	10	5.3	1	1.1	2	2.5	...	...	4	6.6	9	12.5	1	.9	...	...
do. Nervous System	6	3.2	8	8.7	1	1.2	1	1.2	...	...	...	...	...	...	2	5.
Tuberculosis	15	8.	2	2.2	1	1.2	...	...	4	6.6	6	8.3	...	...	...	...
Rickets	27	14.4	13	14.1	...	...	...	...	4	6.6	11	15.3	...	...	...	...
Deformities	3	1.6	...	...	...	...	2	2.4	1	1.6	1	1.4	1	.9	...	...
Infectious or Contagious Diseases ... ..	...	...	2	2.2	...	...	1	1.2	...	...	1	1.4	1	.9	...	...
Other Diseases	83	44.4	57	62.	4	5.1	5	5.9	26	43.3	30	41.7	9	8.1	5	12.5
Total Examined	187		92		79		85	...	60	...	72	...	110	...	40	...

TABLE OF HEIGHTS AND WEIGHTS—Boys.

NAME OF SCHOOL	Aged 5			Aged 13		
	Number examined	Average height in inches	Average weight in pounds	Number examined	Average height in inches	Average weight in pounds
Simm's Cross	108	40·5	42·0	102	55·2	78·5
Warrington Road	42	40·5	41·7	52	54·0	75·0
West Bank	48	40·0	40·2	31	54·7	75·0
Widnes C.E....	9	40·2	40·5	40	54·0	76·5
Farnworth C.E.	19	40·0	39·5	28	55·0	78·0
Appleton R.C.	22	39·0	39·2	33	54·5	76·5
St. Marie's R.C.	30	39·7	39·7	65	54·0	76·5
St. Patrick's R.C.	37	40·0	42·0	26	53·7	78·0
Average of the 8 Schools ...	315	40·1	41·1	377	53·7	76·9
Average of a large number of Artisan Town Children	...	39·7	40·9	...	55·8	79·0
Average of the 8 Widnes schools expressed in metric system ... ..	...	Centi- metres 101·5	Kilo- grams 18·5	...	Centi- metres 136	Kilo- grams 36·0

TABLE OF HEIGHTS AND WEIGHTS—Girls.

NAME OF SCHOOL.	Aged 5 years.			Aged 13 years.		
	Number examined	Average Height in inches	Average Weight in pounds	Number examined	Average Height in inches	Average Weight in pounds
Simm's Cross	92	40	42·5	85	55·5	79·5
Warrington Road	37	39	42	40	56·2	80
West Bank	53	40	40	48	54·4	78·5
Widnes C.E.	16	39	39·5	45	55·2	80·5
Farnworth C.E.	17	40	40·5	32	55·5	81
Appleton R.C.	23	40	39·2	39	54·5	74·5
St. Mary's R.C.	28	38·7	39·5	45	54·2	74
St. Patrick's R.C.	20	39·5	43	14	56	91·5
Average of the 8 Schools ...	286	39·6	41·1	348	55·1	76·0
Average of a large number of Artisan Town Children	...	39·7	40·3	...	56·22	84·9
Average of the 8 Widnes schools expressed in metric system ... ..	...	Centi- metres 100	Kilo- grams 18·5	...	Centi- metres 140·5	Kilo- grams 34·5

TABLE SHOWING THE NUMBER OF CHILDREN WHO HAD CONTRACTED VARIOUS
INFECTIOUS DISEASES BEFORE REACHING THE AGE OF 5 YEARS.

NAME OF SCHOOL.	Total examined		Measles		Whooping Cough		Chicken Pox		Scarlet Fever		Diphtheria	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Simms Cross Council	108	92	84	69	52	50	27	23	4	3	2	...
Warrington Rd. ,,	42	37	36	27	19	19	5	12	1	...	3	...
West Bank ,,	48	53	38	39	15	23	18	23	1	2	1	...
Widnes C.E. ...	9	16	8	11	5	2	4	2	1	...	...	...
Farnworth C.E. ...	19	17	11	10	7	9	4	4	...	1	...	...
Appleton R.C. ...	22	23	18	19	10	7	8	2	...	1	1	...
St. Marie's R.C. ...	30	28	20	24	13	10	4	3	...	...	...	...
St. Patrick's R C. ...	37	20	24	11	9	8	9	5	...	2	...	...

